

# Work Order ID 56840

March 10, 2010 3:52:15 PM



Page 1

Item ID:	D2010-104	Accept		Setup	Start	
Revision ID:						
Item Name:	Mirror Arm 369/500				Stop	
Start Date:	10/03/2010	Start Qty: 20.00		Cust Item ID:		
Required Date:	17/03/2010	Req'd Qty: 20.00		Customer:		
Reference:						

Approvals:	Process Plan:	<i>14</i>	Date:	<i>10-3-10</i>	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D2010	Rev D								

100		0.00							
	NC BRAKE								
Brake NC	Memo	0.00							
Brake NC	Punch per Dwg. D2010-104 and Spec Control Dwg D2727 Identify as D2010-104								

*20X*

*=> m. k 10/03/17*

110		0.00							
	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1- Bend as per Dwg D2010 using bending Jig D2010-104T2 2- Deburr ends								

*20X*

*=> m. k 10/03/17*

120		0.00							
	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1- flare before installing plug as per dwg D2010 2- Install D2057 plug as per Dwg D2010								

*20X*

*=> m. k 10/03/23*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Page 2

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Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00	8/10/23			counters (X20)			
140  Powdercoat Powder Coating	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 M105642 Memo START TIME: 8:00am OVEN TEMPERATURE: 320°F FINISH TIME: 8:30am	0.00 0.00	=) el 10/03/24			(X20)	✓		
150  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00	BR 10-3-24			(20)	✓		

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**NOTE:** Date & initial all entries

# Picklist Print

March 10, 2010 3:52:19 PM

Page 1

Work Order ID: 56840

Parent Item: D2010-104

Parent Item Name: Mirror Arm 369/500

Comments: IPP ☐ A ☐ 04.02.17 ☐ New issue ☐ KJ/JLM ☐

IPP Rev:B 08-05-27 as per ECN1195P DD verified by:EC


IPP Rev:C 08-06-20 rev.D as per dwg DD verified by:EC

Start Date: 10/03/2010

Required Date: 17/03/2010

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
M304TR0.500W.049		Purchased	No			100	f	91.5815	31.5789			
												
304 RD Tube .500 x .049W												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

MAT

91.5815395

111814

31.5815395

114045

60

110

Each

57.0000

20.0000

D2057



Plug

Manufactured No

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST006

57

34366

42

40048

15

B57039 ✓

M.L  
10/03/17

31.5789

~~7x~~ M.L  
10/03/17

7x M.L \*  
10/03/23

W/O:		WORK ORDER CHANGES					
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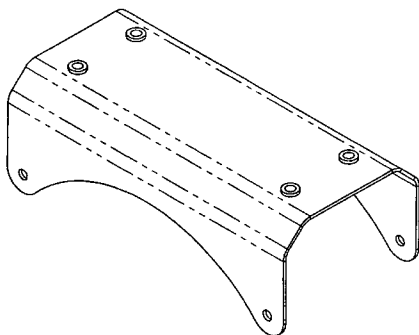
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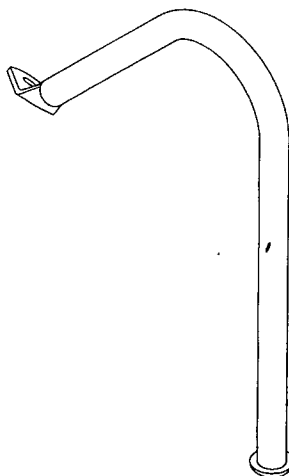
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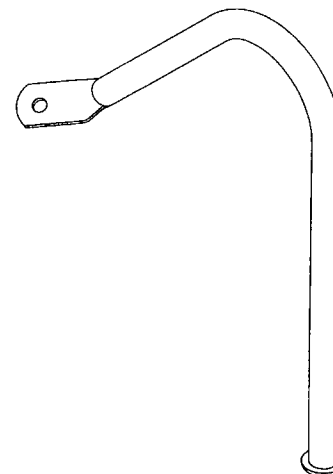
8 7 6 5 4 3 2 1



**D2010-101 MIRROR BRACKET**



**D2010-103 ARM**



**D2010-104 ARM**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 56840  
B210-3-10

**RELEASED**  
2008/19/11

D	REDRAWN IN SOLIDWORKS; ADD D2010-1F FLAT PATTERN FOR D2010-101 (ZN B7-2); Ø0.500 X 0.049 WALL WAS Ø0.500 X 0.035 WALL (ZN B1-3, B1-4); REASON: TUBING CRACKING DURING SERVICE	PH	08.06.10
C	1.93 WAS 2.00; 0.50 WAS 0.62	KE	97.10.31
B	7.80 WAS 10.90	JB	92.03.17
A	NEW ISSUE	JB	90.12.15
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	PH		
CHECKED	JB	DRAWING NO.	REV. D
MFG. APPR.	JB	D2010	SHEET 1 OF 4
APPROVED	JB	TITLE	SCALE
DE APPR.	JB	MIRROR BRACKET	NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

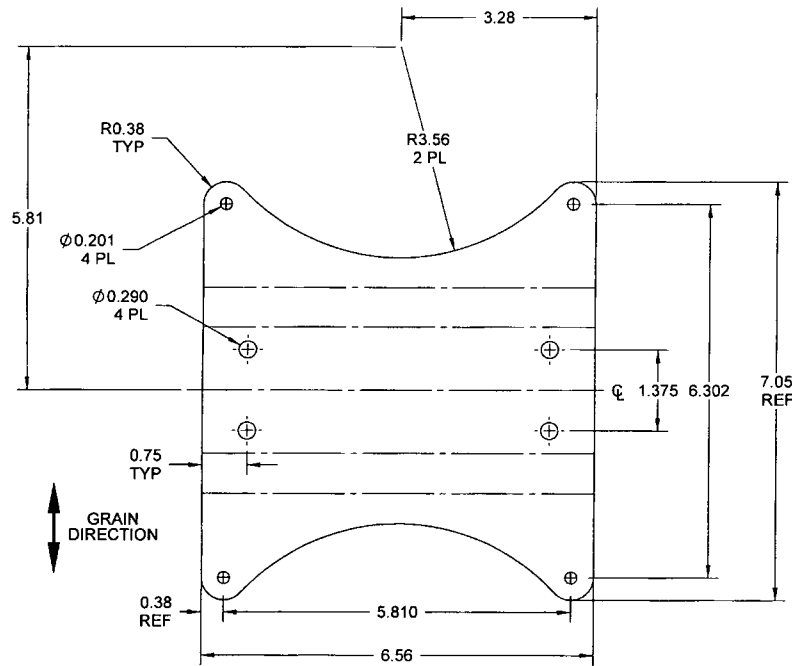
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

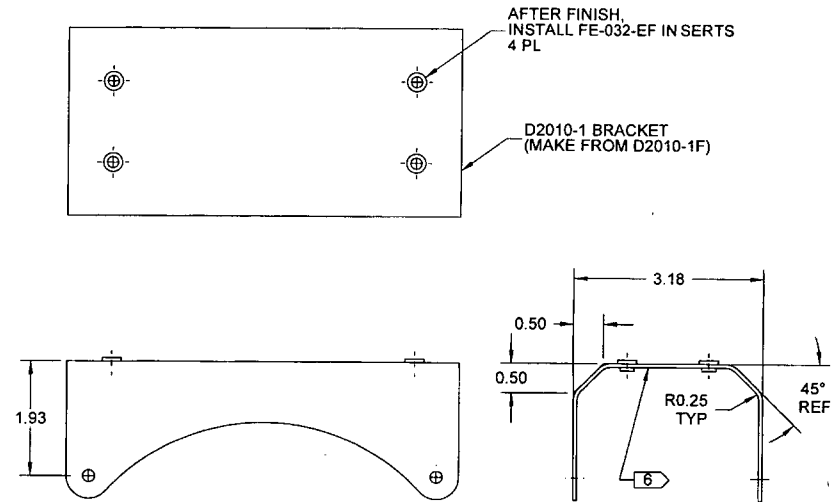
**NOTE:** Date & initial all entries

QTY -101	P/N	DESCRIPTION
X	D2010-101	MIRROR BRACKET
1	D2010-1	BRACKET
4	FE-032-EF	INSERT

w/o 56840



**D2010-1F FLAT PATTERN**



**D2010-101 MIRROR BRACKET**

**RELEASED**  
08-06-10

**NOTES:**

- 1) MATERIAL: D2010-1F: 2024-T3 ALUMINUM SHEET, 0.063 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2010-101" USING WHITE FINE POINT PERMANENT INK MARKER OR LABEL
- 7) WEIGHT: 0.23 lbs

DESIGN	JB	<b>DART AEROSPACE LTD</b>	
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MFG. APPR.	JB	D2010	SHEET 2 OF 4
APPROVED	JB	TITLE	SCALE
DE APPR.	JB	MIRROR BRACKET	NTS
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8

7

6

5

4

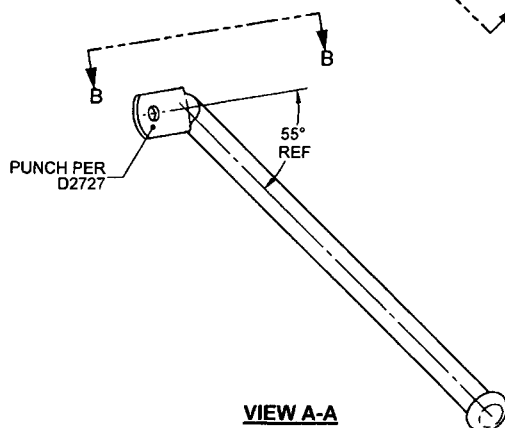
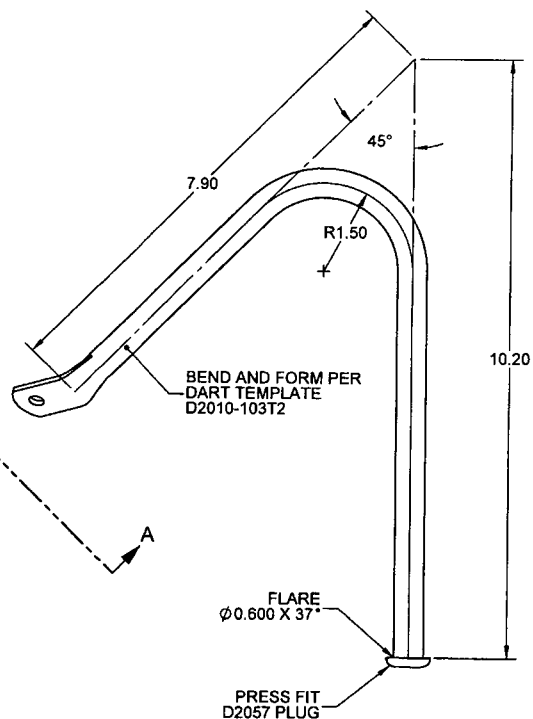
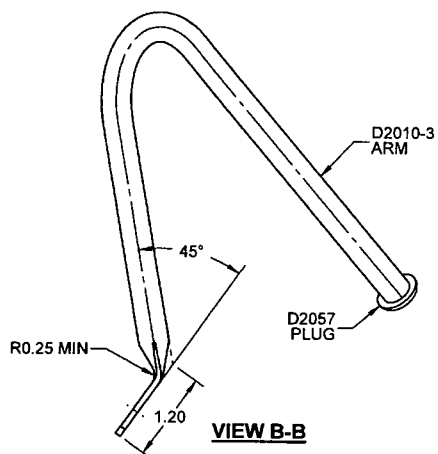
3

2

1

QTY -103	P/N	DESCRIPTION
X	D2010-103	ARM
1	D2010-3	ARM
1	D2057	PLUG

w/o 56840

RELEASED  
08 06 11

- NOTES:
- 1) MATERIAL: D2010-3: AISI 304/316 SS SEAMLESS ROUND TUBING,  $\phi 0.500 \times 0.049$  WALL (REF DART SPEC M304TR0.500W.049)  $\Delta$
  - 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2010-103" USING WHITE FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.34 lbs

DESIGN	JB	DART AEROSPACE LTD	
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MFG. APPR.	IS	D2010	SHEET 3 OF 4
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W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

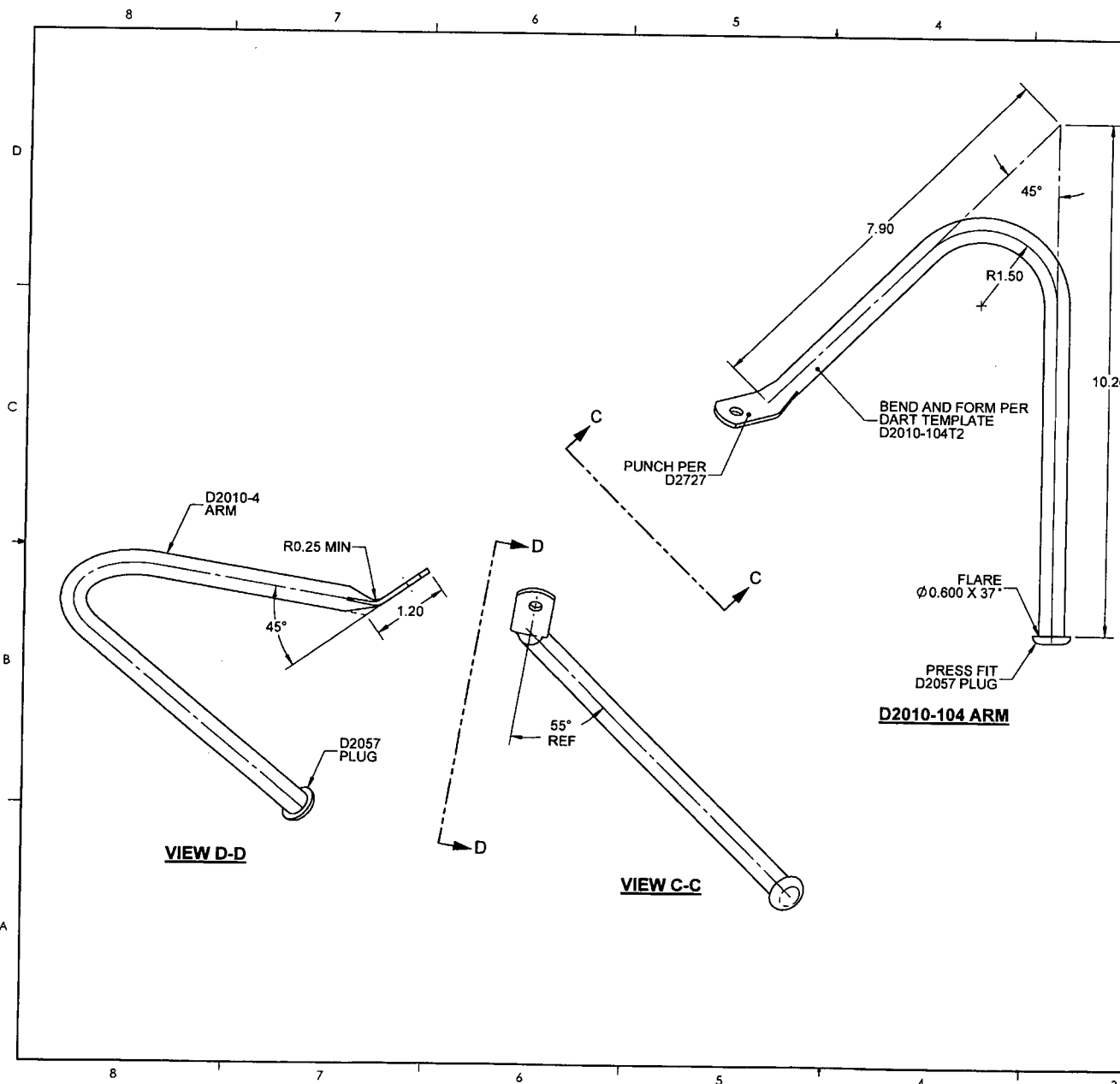
QTY -104	P/N	DESCRIPTION
X	D2010-104	ARM
1	D2010-4	ARM
1	D2057	PLUG

w/o 56840

RELEASED  
08-06-10

- NOTES:
- 1) MATERIAL: D2010-4: AISI 304/316 SS SEAMLESS ROUND TUBING,  $\phi 0.500 \times 0.049$  WALL (REF DART SPEC M304TR0.500W.049)  $\Delta$
  - 2) FINISH: POWDER COAT BLACK SANDEX (4.3.5.7) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2010-104" USING WHITE FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.34 lbs

DESIGN	JB	<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	RH	DRAWING NO. D2010	REV. D
MFG. APPR.		TITLE	SHEET 4 OF 4
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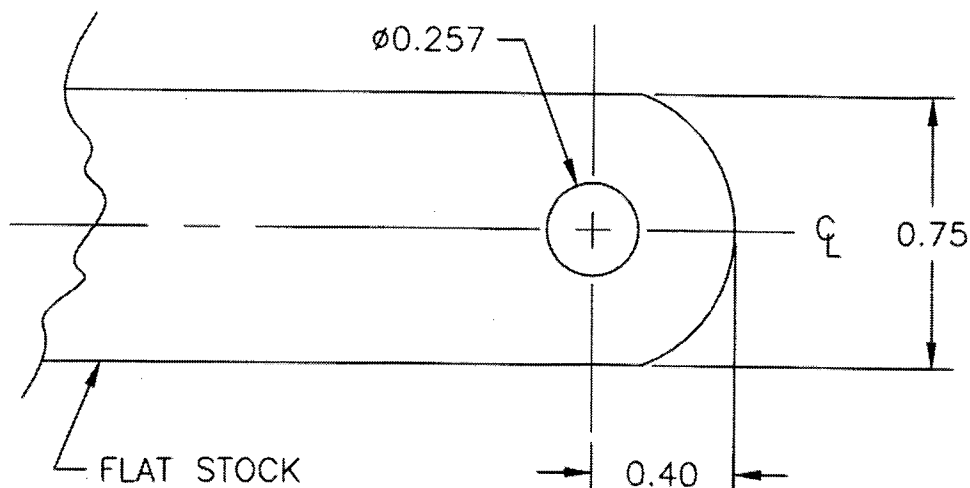
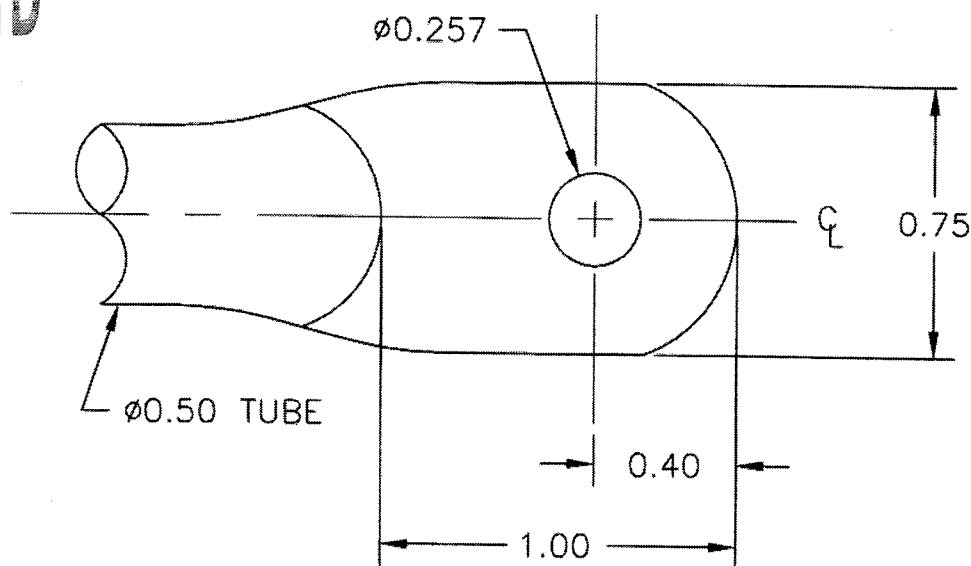




DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2727	REV. A SHEET 1 OF 1
DATE 97.11.24		TITLE PUNCH DT8012 SPEC CONTROL	SCALE 2:1
A	97.11.24	NEW ISSUE	
A1	#1P 01.12.20	ADD TOLERANCE NOTE	

## SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

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98/03/06 KE



NOTE: TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

